

ABSTRACT OF THE DISCLOSURE

A ring-shaped permanent magnet comprising a Nd-Fe-B magnetic material is integrally insert-molded within a distal part of an inner periphery of a cylindrical supporting member. By employing this structure, a coaxial alignment accuracy of the permanent magnet relative to the supporting member depends on only an accuracy of a die for insert-molding. Accordingly, the coaxial alignment accuracy improves. Moreover, the ring-shaped permanent magnet comprising the Nd-Fe-B magnetic material expands in its radial direction when cooled down, while the supporting member comprising a resin contracts, thus the permanent magnet is firmly held by the supporting member. Indeed, a pore space is not created between a bonded surface of the supporting member and that of the permanent magnet. Therefore, the coaxial alignment accuracy will not go wrong.